Abstract

A gate comparator control panel, in accordance with the subject invention, allows a user
to define up to four different gate regions that may exist on any of the live waveforms, maths
waveforms, or REF waveforms. A menu for each gate controls the position of each gate and
selects the source for the signal that is to be gated. All gates must be the same width. A high
level application copies the gated region of a waveform into a REF memory. For example, Gate
1 would go into REF 1, gate 2 into REF2 and so on. A user-settable tolerance value is used to
determine if difference between the waveforms of the gates reaches a point at which a violation
is indicated. A master gate position control causes all gates to move by the same amount, thus
maintaining a constant distance between them. A master gate width control causes all gates to
change width. Run, pause, and stop menu items are used to control how the gates automatically
scan though the waveforms to which they are attached while maintaining constant spacing
between them. A comparison is performed on a point-by-point basis between the signals of the
gates.